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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,927	11/16/2000	Takashi Yamamoto	001527	3205

23850 7590 07/13/2004

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/712,927	Applicant(s) YAMAMOTO ET AL.	
	Examiner Christopher RoDee	Art Unit 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-11,13,14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-11,13,14 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The electrostatic charge of AEROSIL R812, NY-50, and RX-50 in the examples must be added to the specification to provide proper antecedent basis for the claim limitations of hydrophobic silica having a negative charge polarity now recited in the independent claims. The evidence does not provide a description of R972D, so no similar amendment should be made for this material.

***Claim Rejections - 35 USC § 112***

Claims 1-3, 5, 6, 8-11, 13-14, and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This rejection was set forth in the last Office action. Briefly, the Examiner noted, "It is apparent that the application as filed does not provide basis for the current claims because the specification does not describe an external additive comprising any particles having an opposite charge to that of the inorganic particles with the inorganic particles having the specified diameters. The specification is particular in its description of the external additive particles combined with particles having a mean particle diameter of 30 to 100 nm. Specifically, these external additive particles must have a smaller diameter than the particles having a mean

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particle diameter of 30 to 100 nm. " A thorough description of the specification disclosure with reference to the examples was provided.

In response to this rejection applicants have amended the claims to specify external additives of inorganic fine particles are hydrophobic silica having a negative charge polarity and fine particles having a positive charge polarity. The specification specifically discloses silica as an external additive (spec. p. 22, l. last) and Toners D and H disclose hydrophobic silica having a size of 40 nm, which is within the specified size range of the instant claims. The technical submission concerning AEROSIL additives from the manufacturer shows that the specific silica (RY50) has a negative electrostatic charge. Also note Toners E and F as providing basis for the amendment. Thus the specification as filed provides basis for this limitation.

Applicants note that the external silica particles in the examples are used with positive charge polarity fine particles in Toners E, F, and H. Toner E uses the negative charging silica particles (30 nm) with 0.5 parts by weight of positive polarity particles (trade name Epostar S-6). Toner F uses negative charging silica particles (40 nm) with 0.4 parts by weight of positive polarity particles (trade name P- 2000). Toner H uses negatively charging silica particles (40 nm) with 0.8 parts by weight of positive polarity particles (trade name P-2000). This disclosure combined with the description on page 7 of "The charge amount of at least one kind of the external additives has different polarity from other charge additives" is seen as providing basis for the positive charge polarity on the other external additive (i.e., the fine particles).

The specification does not, however, provide a description of any size fine particles having a positive charge polarity as another component of the external additives.

As discussed in the last Office action, the specification on page 7 states that the external particles comprise at least particles having a mean particle diameter of 30 to 100 nm and particles having smaller particle diameters than the particles having a mean particle diameter of

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30 to 100 nm. The specification is explicit that when particles having a size of 30 nm to 100 nm are present, the other external additive particles (i.e., fine particles) must have a size smaller than the 30 nm to 100 nm particles. The claims continue to permit the fine particles to have any size, which is without basis in the specification as filed. The recent remarks and amendments do not appear to specifically address this point.

Although helpful, the recent amendment does not specify the size relationship of these external additive particles as required by the disclosure. The rejection is still seen as proper and is maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr  
9 July 2004

  
CHRISTOPHER RODEE  
PRIMARY EXAMINER